

CLAIMS

What is claimed is:

1. A process for binding nucleic acids to a carrier, wherein the nucleic acids are dissolved in a solvent containing at least one compound selected from the group consisting of betaines, the obtained solution being applied to a carrier and the nucleic acids being bound to the carrier.
2. The process according to claim 1, wherein the compound selected from the group consisting of betaines is trimethylammonium acetate.
3. The process according to claim 1 or 2, wherein the compound selected from the group consisting of betaines is present in said solvent at a concentration of 8 mM to 6.5 M.
4. The process according to one of the preceding claims, wherein the solvent contains about 1.5 M of sodium chloride and about 150 mM of sodium citrate, and wherein the pH value is about 7.
5. The process according to one of the preceding claims, wherein said carrier is made of glass.
6. The process according to claim 5, wherein said glass is coated with poly-L-lysine and/or an aminosilane.
7. The process according to claim 6, wherein said glass, after binding of the nucleic acids thereto, is treated in order to deactivate the poly-L-lysine and/or the aminosilane.
8. The process according to claim 7, wherein said glass is treated with a

solution of succinic anhydride as blocking agent and an acylating catalyst in an unpolar non-aqueous solvent.

9. The process according to claim 8, wherein said acylating catalyst is N-methylimidazol.
10. The process according to one of claims 8 or 9, wherein the unpolar non-aqueous solvent is 1,2-dichloroethane.
11. The process according to one of claims 8 to 10, wherein 0.2 g to 20 g of succinic anhydride and 1 ml to 10 ml of N-methylimidazol are dissolved in about 200 ml of 1,2-dichloroethane.
12. The use of betaines as additives for solvents in which nucleic acids are dissolved in order to bind them to a carrier.